ADDRESS OF ~~MRS.~~ Dr. MARIA MONTESSORI.

Translated by Anne E. George.

Salutation.

Impression, being in America.

The greatest interest shown in various forms in all parts of the world. Interest perhaps greater than knowledge.

The wireless telegraphy.

Interest which is spread abroad without any great institute, without other means than the feeble voice of a child.

Show the spirit of the phenomena. How it came into being.

I wish to introduce myself not as a person, not personally, but in relation to this phenomena, not because of my own importance nor because of my own personality, but so as to give importance to the phenomena. A person prepared by positive science which today directs all human thought. A scientific doctor who has studied psychiatry, pediatry, and child hygiene in laboratories, and has been a devotee of this science; has published scientific works. A difference between her and the other scientists, psychologists, pediatries, etc. was that whilst they became scientists of various kinds she had pursued not a science but an unknown force within herself. She did not become an authority on science because as soon as she had reached the point where it would have been considered as an authority, she changed, for she felt in every positive science a great lask.

Serious preparation for scientific researches. She was a professor in the University of Rome. The scientific studies had a pedagogical aim; began the experiments with a purely scientific idea; was given an experimental

field, and has made of this a basis for scientific studies and laboratory work, anthropological studies and sociological studies of the child. She has followed all these sciences with passionate devotion. For instance, when patients were sent to her from all parts of the city she cried out, "Why do you send them to me? Send them away. I must study." So devoted to study was she that nothing seemed too low nor too trivial; whereas, the other scientists had wished to do things that were considered important by them, as , for example, the analysis of the sputum, etc. She was content to play with the children, to sweep the rooms, and to aid them in every way. The other scientists were scornful, and this attitude of theirs showed that there existed something which was lacking in them? She had discovered a new attitude ---- an attitude of humility, whilst they considered it important, those things which were thrown off by the body, and she had found importance in, also, in the meanest, smallest things relative to the life of the child. Hence, she gave a lesson in the University of Rome which perhaps was not very well understood. She said, "Did you ever think of the difference between the social position of the teacher and the doctor?", and then she went on to speak of the redemption of the teacher which would take place when science entered the school. The disparity in the preparation between the teacher and the doctor shows the disparity in social consideration. It is as if society were in a primitive state of sense education, where it is able to distinguish between the grossest and finest stimuli, but the whole gradation in between those two is not cognizant of it, but all

gradations between these it is not unconscious of all gradations which lie between the two extremes. Thus society concerns itself with the extremes but the medial, the normal, which lie between escape notice, is not studied.

Science has really been useful. It has conquered not only sicknesses but even death in various forms. Medicines really has triumphed over death, and in certain maladies it has completely triumphed. It has borne within it a great truth, a great force, and hence society has responded with honors of every kind. On the other hand, the common school has done nothing for normal life.

When we begin to care for and protect and develop the normal life then more, immensely more, will be the recognition of society given to the teacher for the service done by the teacher will be infinitely greater than that performed by the physician.

We must study life and strength, not the cast-off, the dregs, and the enfeebled, for only those can we develop the real forces. It was my idea that science should enter upon and study the normal within the school. It was my intention to care for the little children in my school in every way, to study the entire expression of their life. I was already a past grand master of this method of studying and treating the mental, criminal and bodily sick. I had all these means at my fingers ends, and my idea was to study by such scientific methods, the normal children. I was much discouraged with the mistaken direction taken by modern psychology. I found that the scientists and psychologists were trying to discover the differences in the normal man as the scientist

had been accustomed to establish the differences between the paralytics, the epileptic, etc. They carried on these studies for the sake of establishing the various grades of intelligence, not for the purpose of developing life. Psychology established its lines according to the means used with the abnormal. Lost time in ranking individuals according to the grade of intelligence. It seemed ludicrous that they should work in this way simply because they had been accustomed to classification in the study of the abnormal. Such classification is useless with the normal children. They were entering the field of psychology as judges; they were not capable of judging. They had not sufficiently studied the normal life.

She took with her into her work not the method of measuring, comparing and judging, but the quality of humility which all scientists, all true scientists, have in their work. All great scientists stand revered and humble, awed and quiet before the insect or the germ which they study. This is the attitude which the teacher must bring to the normal life. She must treat with seriousness and dignity the smallest things. Real scientists, creators of real things, give dignity to the smallest detail. How different the attitude with which the scientists regards the germ or microbe displayed on his slide from the attitude which is taken when studying a normal man, as is evident in the general attitude of a teacher toward a child. Our scientists have never had this attitude toward the normal child. The greatest doctor goes humbly to the bedside of the sick one. The

psychologist makes the subject come to his laboratory. No one has yet sufficiently humbled himself to study life in the normal man. The respect which has been shown to a microbe has never been shown to the normal child. This is why we have not succeeded in penetrating scientifically into a knowledge of the normal man. We gladly take the humble position toward a little dog in giving him food, but we shrink from taking the same attitude toward the normal man who is our equal. Christ, when he taught the science of life, the way of life, taught humility as its first principle, and said, "He who would be lord of all must be the servant of all, and he would be master must serve."

This has been combatted on the ground that such an attitude is not in accord with human dignity. But the only true way of life is humility. This has been contested on the ground that it is opposed to human dignity. But the true and only way of life is humility, and though all have denied and opposed it, now science has come to show that it is indeed the only way of life. In ten years time the attitude which scientists now hold toward the normal man will be considered ludicrous; that whereas today instruments of precision are considered a necessity for the study of the normal, in reality all that is needed is this attitude of humility. The aim of present day psychology is entirely erroneous.

Let us consider how the greatest physicians stand humbly attentive before the sick child, watching him and receiving and accepting ecen impertinance from him,

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and, on the other hand, let us see how the teacher's attitude toward the child varies in this. Her interest does not transcend her own ego. She must become the servant of all before she can learn the way of life. We are not to be heads of state. Life cannot be commanded; life must be worshiped, respected and helped. With positive science we have touched truth bu religion has never been touched upon by science. However, as soon as we begin to study normal man, religion is revealed to us, for religion is a thing of man, related to the laws of the life of man. It is not a characteristic of the animal; not a characteristic of the material world.

Her beginning was in accord with this characteristic of science---this characteristic of humility. She began her work in a miserable quarter of Rome, the most wretched place that could possibly be imagined; a neighborhood where amid vile streets people lived like savages. So savage was their attitude toward life that they resented the coming of a well-dressed person, and as she walked through the streets on her way to help these people, fruit skins and bits of wood were thrown at her. The great cemetery of Rome lay on the opposite side of this quarter, so that one might almost say that only the dead passed through those streets. Children, vile and sick, might be seen selling fruits and vegetables with the evidences of their sickness strong upon them. As she looked upon the mud in those wretched streets it seemed to her that it was not made of

earth and water but of offal of humanity. In spite of all this she still had humility, the reverence of one who seeks to know life. As she walked through this wretched quarter she thought of the scientist who goes forth to study malaria. He goes out in the early morning, when the mists are arising from the stagnant swamps, when the mosquitos are awake and most dangerous. She said to herself, "This is science that I follow. I go also to study life. It seems to me that this place which I have entered is a real field for scientific study."

It was my intention to apply to these little children in general the same methods used with deficients since there exists a relationship between the young child whose senses are still undeveloped and the deficient child, Methods which had proved helpful in the study of the deficient child should, it seemed to me, be valuable to one who attempted to follow the development of life in the growing organism. In the second place, it was my intention to analyze, step by step, the help presented to these children. I had been struck by the confusion of ideas in the presentation of lessons in the common schools. The teachers often pour upon the child a flood of works presenting various phases of the subject. It was my belief that with simplicity children would learn more clearly and with less effort and loss of some things. It was my intention to analyze in order that the child might receive his perceptions clearly and concisely. As to my attitude, it was to be the attitude of a scientist. I was not coming to teach them. I came with the ardor of the

scientist who desires to come upon the spontaneous manifestations of life and to assign to them their proper value.

During the first days of my work in San Lorenzo, a little child of three and a half stood in a small-armed chair before a table on which was placed a block containing cylinders. He was busy taking out the cylinders and putting them back, never stopping to look at what the other children were doing. He took them out over and over again. The sight of this little child working with such great interest and attention by himself, made a great impression upon me. Desiring to test his interest, I called to him. He made no answer. In order to see what he would do, I took hold of the little chair by the arms, and lifting it up place it with the child in it on the table. As soon as he saw that I meant to lift him up from the floor he grabbed his cylinders, holding them with great care in his little apron, and as soon as I had set him down on the table he arranged the cylinders upon his lap and continued to put them in and take them out. Amazed at this, I called to the other children in the room -- "Count, count; let us see how many times he does it." He completed the exercise forty-two times, and at the end of it, looked up with an expression upon his face which revealed the fact that he had experienced something precious in his inner life.

This incident made a tremendous impression upon me. I felt that it was in the nature of a discovery. "Here lies," I said, "the difference between the education of the normal child and the deficient." The idea with the normal child

was not merely to teach the child the difference between big and little, but to give him a means of developing, or acting for himself, a means for self-activity.

The whole purpose of education should be to awaken activity. I had presented an exercise through which I thought the child might come to discriminate between large and small, and instead, I had awakened an activity within him so far-reaching that my powers of observation could not possibly measure it. We can only teach the abnormal child things; we cannot awaken activity. So in our schools today too often we teach the normal child things and do not awaken activity. If the scope of education for the normal child is the development of activity, we must make of our schools places where these manifestations may develop, may be free. We must permit liberty for the manifestations of life. We must leave the child free for the activities which a rational scientific sense-education knows how to awaken and provoke in him. As I had come to this great understanding through seeing this little child at work, it seemed to me that I suddenly understood what it was that I was doing. As I had had a scientific preparation through which I knew how to stimulate rationally these activities, the work went forward rapidly. As we found that those activities, provoked by rational sense stimuli needed only to be stimulated, the teachers trained by me diminished their activities. The teachers came to do less, the child to do more. My teachers became to be directresses of the spontaneous activity of self-governing individuals.

So, in the children's houses, the school has assumed the attitude of humility. The teacher serves, waits upon life. She does not teach. When the children begin to show remarkable signs of development, I, who was still somewhat under the shackles of old ideas, demanded of my teachers, "Why have you told them to do this? Why did you not wait and leave them free? By forcing these results you are ruining my experiment," and when the teacher said, "But we have not taught the children this; we have said nothing about it; they have done it spontaneously," it seemed to me too marvelous to be true.

So, as my first discovery had been that a small child if given the proper occupation could remain for a long time at work by himself, my second discovery was that truth is far larger and greater than any of our restricted ideas of truth, for while I had started out to teach with my cylinders, the difference between the large and small, great and wonderful developments had sprung up from the presentation of this material. This slight stimulus had awakened and brought

forth the riches of the whole individual. It was unexpected; it was a surprise. It taught me that we can never measure or gauge the results of stimuli applied humbly and reverently.

The illustrations of this spontaneous activity are numerous. When I came into the schools the children would come to me and stroke me, and greet me. I said to the teachers, "I know you are fond of me; I know you want the children to be gracious to me, but please do not teach them to come in this way. I want their courtesy to come spontaneously. Do not disturb the serenity, the peaceful growth that is going on in this room." Finally, one day all the 45 children followed me out of the school along the street and the teacher followed the children, very much upset, and asking me what should she do; should she tell the children to go back. I said, "No, leave them alone," but the passers-by were so excited over the sight of the school walking in the street that they began to make such remarks that I called the children around me and said to them, "See, little ones, if you can go back to the schoolroom on the point of your toes, without making the least noise." The children started off and silently on the tips of their toes they retraced their steps. I was simply astonished by the growth manifested by those children. The children developed a great gentleness and lovingness toward each other. This was shown one day to me in a very interesting manner.

The children I was teaching were the poorest of the poor. Many of them had not even enough to eat every day.

Some society ladies came down to visit the school and brought with them a quantity of the finest candies and sweets, placing them on the table before the hhildren. "Now go and eat them, children," they said, but the children hung back. The ladies thinking that the children were waiting for the permission from the teachers, said, "But you can eat them; you can eat them now," and the children said, "We would rather take them home with us and eat them with those who are at home." The ladies said, "But there are [redacted] plenty; eat some now," and the children, from a sense of graciousness, helped themselves to one or two candies from the pile which they furtively slipped into their pockets to be taken home with the rest.

Another day some very large candies which are used at weddings in Italy were brought for the children, and greatly enjoyed by them. They were tied up with colored papers and contained "fortunes." Many weeks later the teacher was visiting a little child sick in bed, and the little one, turning to her said, "Do you remember those wonderful candies, those wedding candies that we had?" The teacher said, "Yes." The child thereupon produced from some corner beside his bed one of those large wedding candies and said, "Here it is; I have kept it for you." He had been hoarding it all this time for his teacher.

The extemnal manifestations of enthusiasm which these developing children showed seemed to me analogous to the spirit of a conquering race. We find some joy and vigor in the child who conquers anything. Seeing [redacted] this shown forth in many forms, I said, "This is indeed the child of man."

We see here all the best qualities of the man developing in the child who grows normally in this environment. The development of graciousness and cordiality was very remarkable. One day I had given them a lesson in etiquette; had shown them such little things as how to hold their handkerchiefs, how to blow their noses properly; how to greet each other; how to offer hospitality. At the end of the lesson, as I turned away, the children spontaneously burst into applause, clapping their little hands and thanking me for the lesson. The most interesting thing which I observed was that at a certain period of the child's development he wants to bring his work to show to you, and that he only brings it when he has done all that he could, and when I look at them I am instantly reminded of the parable of the talents. The same commendation was given to the man whose talents had produced ten other talents as to the man whose talents had multiplied one hundredfold, and I realized how futile it is to comment on the imperfection or to draw attention to the faults, realizing that the child has done <u>all</u> that he could, which is much more than can be said of any grown person. And, how foolish our demand that every child shall give us thirty talents for the one, completely overlooking the individual ability. So, as Christ said in the parable of the talents, we make no observation but simply say: "Well done, thou good and faithful servant. Enter thou into the joys of the Lord." Our only wish is that he shall continue in the way in which

he had set his foot. Each one of the children developing normally, does the best that he can. The level must necessarily be different. It is rare that man in general does the very best that he is capable of. The ordinary method demands for the man of one talent the same result as that given by the man with ten talents. We put a commercial value on what pupils give us. We must come to recognize that the level must be varied, and that we must value the individual according to his ability.

I went into my work with the scientific idea of doing definite scientific work. There came a time when the [redacted] result was such, the spirit of liberty so fully developed, that I arrived at a point where I lost all desire to make scientific research, to compile reports of my experiments. It was as if I had found the secret garden, the place of peace, in which I only wanted to live with those children and to enjoy what they did, to enjoy their development. I put away from me all the scientific work, Scientific language came to be almost revolting to me. It seemed inadequate when I wished to describe the manifestations which were taking place about me. I wished to speak of it in terms of religion. I left behind me all my work in life of a physician. I lived with the children, played with them, ate with them, slept with them at midday in the garden. Sometimes mothers called to me from the windows asking for medical advice. These requests came almost as a shock to me for I had left all that behind me. My only feeling now was that I was glad to my medical preparation in so far as it enabled

me to communicate with and help the mothers of my children. The effects of the beautiful development of these children upon their homes and their parents was very remarkable. The fathers who were in the habit of spending their evenings in the wineshops and in the streets, became so delighted with their children, so interested in what they could do, that many of them left off their bad habits and began to stay at home. One day a mother, who was preparing some dish, had on the table square pieces of butter. A child standing beside her and watching her said suddenly, "It is a rectangle." She cut off a piece of the butter and the child immediately said, "It is a triangle." Then when she had cut off another bit he cried out, "Now is a trepezoid." This was Greek to the mother, but the father who was a room decorator, and who knew something of those terms, was amazed and delighted and came to me and said in proud surprise, "Do you know that my child knows geometry?"

The story comes back to me of a bad and brutal father whose poor, mistreated wife was a most unhappy creature. This man had two little children in the children's house, one five and a half years of age and the other four. One Sunday the teacher, standing in the door of the schoolroom, saw the mother walking along carrying the food which was to serve for the family dinner, and followed by the slouching, brutal father and the two little children. As they passed the door the teacher smiled and said to the father, "Won't you come in and see the school?" He gruffly replied in the negative, but she insisted, and finally the children,

drew him into the schoolroom. The teacher spoke to the eldest child and asked him if he would not like to show his father his pictures, and how he could write. The younger child, who stood by eagerly interested, said, as he watched his elder brother writing in big round letters, "I, too, father, will write for you." The teacher, whose faith---as with all of us---was not great enough to appreciate the child, said to him, "Why, no, dear, you cannot write." "But I can," said the child, and taking up a piece of chalk for the first time wrote clearly and legibly. This ability had been maturing within him and his beautiful desire to give pleasure to his father had been the stimulus which had called it forth. The father felt something of this growth that had taken place within his child and expressed his appreciation of it by removing from his head the cap which he had been so ill-bred as to retain on his head when he entered the schoolroom.

During this period there was held in Rome a congress of women and I was urged to speak but being so happy and content with my children I refused to go. A great scientist, prince of the realm, was much interested in what he had heard of my work, and wished me to speak at this congress, and came to see me in school. He saw the remarkable development of the children but said carelessly that of course it had been prepared for and was the result of the teacher's manipulation. However, he was interested enough to come a second time, and during this visit some spontaneous

act of one of the children brought home to him, "Is it really you, my child, who did this? You did it yourself?" And then turning to me he said, "This is worth all the congresses in the world. Why do we hold conventions? Why do we read papers when this that I see here solves all our problems. You must come; you must come and speak to us about it." I did not go, however, and the people attending the congress began to come to my school. In this way the fame of my work was spread. Then began the days of pilgrimages. People came, one after another. The teachers in my schools were amazed at the children's goodness in the presence of these crowds of visitors. Strange to say, the children developed a great gift for hospitality and graciousness, receiving the guests, asking them their names, showing how they used the various materials, and relieving the teachers of all the burdens of hospitality.

One day Senora Joeletti, a daughter of the Prime Minister of Italy, took some famous guest to the school. It was during the vacation and she found the school closed. Four or five little children were playing in the court and saw her and asked if she wished to see the school. They then got the key, opened the school, and from the windows called to the little children in the courtyard to come in. They opened the cupboards, took out the material, and went through the whole performance of the school. So the ladies received the best possible impression of the effect of this kind of school on little children, for they did the whole work alone and spontaneously.

I was talking of these things with the teachers, and one of the teachers said it was like the days of Pestalozzi at Yverdom, when visitors came to see him. But one of the teachers said there was no record of such crowds as came to our school.

A great Italian master, Boddio, having seen the schools, said, "This is just what we need in Italy. We must learn the conquest of liberty through discipline. Italy is united but it must be taught liberty through discipline."

Then people came who marveled at the perfect writing. They brought children of the third grade who they said could write as well as our children, and when we compared the writing we found that our children's books and papers were neater and cleaner than theirs.

NOTES:

Tallamo, and newspaper interest in schools.

Beme Stabili's attitude towards schools.

Anecdotes of Senora Jocletti and Senor Tallamo with Queen Lady-in-Waiting, in reference to cleanliness of Beme Stabili's buildings; reason of cleanliness in children's copybooks.

The superintendent of education in the City of Rome came and though considered conditions good, stated that Italians might think them good but in America they would seem ordinary. On the contrary, Americans came and marveled

at the perfection, saying "We have nothing like it in America."

Miss Tozier said, "We have nothing like this in America, and you do not realise what you have done."

From England, the same story. One lady said, on seeing the children, "This is the kingdom of Heaven."

Then follows history of how book was written.

Attitude of Baron Franchetti.

Whole book written in six weeks.

Insistence of Baron Franchetti that book should be written red-hot.

Gave training course of months in summer villa of Baron Franchetti.

Franchetti himself attended course in the morning, two hours and a half. At the close of the course gave a big reception at which he made a speech saying, "I have no words in which to convey my feelings, but I know a quotation, I do not know where I have read it, which gives expression to it (it must be remembered that Franchetti was a Jew). The quotation is 'Glory to God on earth; peace, good will to man."

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Note:-

This is the first of a series of lectures given by Dr. Maria Montessori at the Montessori Normal College in New York City. The lectures were translated "on the spot" by Miss Adelia Pyle, and taken down by Miss Helen Parkhurst. The lectures were in no way revised or corrected by Dr. Montessori. The wording of proofs was corrected by Miss Parkhurst.

First Lecture

by

Dr. Maria Montessori

at

The Montessori Normal College.

New York City.

Oct. 19, 1916.

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Montessori Training Course, — First Lecture

THE HISTORY AND DEVELOPMENT OF THE METHOD.

I come before you already knowing you very well as I have been informed of you and your work. Although there are similar training schools just starting in Milan and Barcelona, this is my first opportunity of speaking to one of them intimately. It is not the first time I have given lessons. I have given lessons to classes numbering many more students, but there is a note-worthy difference between that and this cycle now beginning.

The movement up to the present has fluctuated, but now with your cooperation we have a nucleus which will be stable. The fact of having an established nucleus where people come for a longer period of time is more in keeping with my method, because this method is eminently positive. It has always started from something humble but always something real. It is not a method based on great discourse and enthusiasm but fact, patience, and work. The history of this movement with which you are probably familiar is an illustration and affirmation of this.

This method started upon an unusual path. Instead of coming from the philosophical sciences it comes from the positive sciences of this last century. Although it may be of but passing interest to you or me, I must say something of the origin.

I was a doctor and after a study of nervous diseases I began to interest myself in children. I was interested in defectives. Doctors gave a glandular treatment. I too was interested. You will note here a principle, i.e., the public are interested when empowered. When we found we could transform the child by a pill, the importance of the child was given prominence. So we too sometimes think that by giving pills we can elevate. The teachers and parents of today often resemble some of the doctors of today, in thinking they can procure an easy means of elevating the child.

When I began to occupy myself with these defectives I found that only comparatively few were affected by the treatment given them, but treatment was not considered impossible. Defectives had been treated fifty or sixty years previously by pedagogical methods. In fact one difference was that the men giving the treatment were called pedagogical M.D's., meaning a small part of pedagogy and a large part of medicine was used. If you tried to teach a class of defective children by ordinary methods, i.e., instructing talking, you would be discouraged, whereas with the normal child one can take many liberties, even keeping him seated three hours or five hours or making his back crooked without being able to see the disastrous results until after the great harm is done.

It is possible, with normal children, to have the gravest pedagogical mistakes, causing unhappiness to both child and teacher and still allow the teacher to feel that she is doing pedagogical work. Talking to unintelligent persons in a long discourse you may confuse them and they may still get some idea. If you are talking to an imbecile your results are different. When you have been talking to a less intelligent person than yourself, if not understood you say, "Oh, I didn't express myself clearly". You try to think of a way whereby you may make them understand. Then you try to express it in two or three words,- then if two or three do not explain you find an object which will penetrate even an unintelligent mind. By so doing you not only find the means of penetrating into the mind of an imbecile but the truest and simplest way of improving yourself. If you try to explain a fact in two words to an intelligent person, you will find enthusiasm that you never expected from that person. Try to think of the weak person also and by brevity and attractiveness penetrate. Not only will you discover the means of penetrating the soul of the weak, but into the minds of all.

And now let us consider even those with heroic characters - those 4

accustomed to listen though bored to long discourses, they will bless you and will say, "I have found a friend". Thus the path that led to the penetration of the mind of the imbecile can penetrate the minds of others. This was an intuitive idea which I had while studying defective children.

We need first the intuition of the training of the teacher,- an auto-education of the teacher where she eliminates herself more and more in perfecting herself. And here we have the picture of the teacher who will say, "I have done things incorrectly". Such a teacher will eliminate until she perfects herself little by little, whereas the ordinary teacher who gives long discourses tries the patience of the children.

In a long work we should, I think, start by teaching of the defective child, because it is necessary to be conscious of the fact that we must be able to practically respond to the child's needs, following the natural development of his intelligence.

We may repeat the same sentences repeated by all, that we must follow the child, but instead of just repeating the fact, we must by scientific experiments try to really find a way of doing these things.

I took children from asylums where they were abandoned, and trained them to pass examinations with normal children. Then I began to apply what I had learned as a method with the normal child. I insist upon this fact, because one of the most common criticisms of this method is that the work began with defectives. But I repeat that the path which leads us to the mind of the imbecile is not a method for the education of the imbecile but a method of education. It was in applying these principles to the normal child that we found surprising results. It was by so doing that years after, with a group of children from two and one-half to five years of age, I applied the method to normal children and found the method known by my name. That group of children, for whom I

have a great feeling of gratitude, were a class of the most inferior people in Rome; a group in a tenement house in a poor section of the city. The people in this part of the city were criminals and defectives,- their children victims of society. Turning from their mental misery, we turned to their social misery, at an age when we least expected them to respond. One might say that was more futile ground for the discovery of something new, i.e., to take the refuse of humanity and find a fertile ground on which to work. But a resolution of a problem in its fundamentals is easier than solving it in its complexity, and the results we had surprised me very much,- also others who came to see the children. The children surprised the visitors because of their energetic responses which they gave, as well as in their moral development. Not being very familiar with the schools at that time I was not as surprised as those who knew the ordinary schools.

It was these forty children who demonstrated the method and did the work of propaganda. These little children became the directors and directresses of their class. They explained their work and people were surprised.

It was not my book which made the idea known, but because of the idea my book was requested. These were the normal children.

But as the method is a part of a long course, it is not necessary to summarize further.

Development of the Method.

Many people thought this method solved pedagogical problems of education elsewhere. For this reason the book has been translated into many languages, i.e., twelve languages, among them the Japanese, Chinese, Russian, and Roumanian, so in the orient you see they are improving methods of education for little children. And many say, "But this is not new, this is already done in our country". Yet why is it that it aroused

interest? It must be that this is a social phenomenon to which there is a response. There was a corresponding response in the various countries, not always with good results, but fourteen countries have schools and teachers.

Imagine people of fourteen countries going and taking even a sketch and feeling responsible to give out this thing. Many came inspired by interest, not because they were prepared to put into practice what they found.

Whereas in other methods one can study a long period of time and then practice under careful supervision, in this in the beginning they had to burst through the fire. But in spite of bad schools the method has not broken down. It was a different idea of the treating of the child.

This method is not only a system of education as the Froebel method is a system, but a different interpretation of life. For example in the last course in Spain, it was not only a course for the preparation of teachers but rather a course which served to study a different catagory of people wishing to study the idea, to find out what it held for them. There were medical students, literary men, and there were the heads of the big religious institutions also teachers who said we don't agree but as the author is here we wished to listen to the idea. And this is the idea which should contain the method of education. And this is the part that interests the teachers because their work has to do with the principle.

It is quite a different thing to learn an exact precision of work and to take a principle which helps life. This is like being transformed from teacher with a small "t" to teacher with a large capital "T", or we might say "master". This teacher holds the child's future. She holds the material and the proofs. If she is not perfect and does not give

exact results this work can have no future.

It is not merely the repeating an idea but this grew out of acts. This experience which we must have with the child, will prove or disprove the idea,- because if our teachers do not have these results, then it will be but one more educational novel. Therefore as I said in the beginning, a school in which the teachers can really learn the idea, is a foundation upon which the castle can be built. So we can say that now we are beginning. Up to the present we have talked,- <u>now</u> we are beginning. And it depends upon you whether this is a passing theory or whether it is the beginning of a something which will help humanity.

Montessori Training Course,

Second Lecture at Montessori Normal College

by

Dr. Maria Montessori

Oct. 26, 1916.

I should like if possible, to clarify some points which refer to the importance of the environment. We are naturally educating living beings. Living beings can not possibly be conceived of, without environment.

You have some physiological ideas of environment. You know that living beings must constantly take in oxygen in order to change their substance and live. How could we think of educating without considering the environment seriously?

I do not wish to say that others have not considered the environment or that I am first in emphasizing it. We really have a generic idea of the environment. We say that a child should have a good moral environment and we speak of elevating people by means of their environment. In these times we speak of environment relative to evolution.

Beginning with the great inspiration which Darwin gave to that line of thought - socially and morally leading up to education. It often happens that when a great philosophical idea comes into prominence that that idea is then applied to all forms of life.

With Darwin and his followers, his idea started as a biological idea, starting with the species and later on was applied to society and the school. It often happens that a philosophical idea started in one field is carried into other fields - Often the idea is modified, i.e., consider for instance the old example of the pebble which when dropped into the water forms concentric circles. The first circle represents Darwin's idea and then it is carried on into sociology, etc. and even if the idea was not great, concentric circles of thought carried on the mistakes. So it may happen that there may be newer ideas of biology more correct but perhaps the circles of the first have just reached the

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school. The mistake may just be entering the school as the new is found.

The biological principles of Darwin relative to man and his environment - is that environment can modify life, especially can modify life by bettering it. This is so true that this doctrine of Darwin holds the perfection of all species of the environment.

So you see importance has been given to the environment - one pretends in certain doctrines and in the school to give certain ideas - in Darwin's theory such great importance was given to the environment that theoretically we could not give greater importance, because this environment almost becomes a god who creates. Also in education some tend theoretically to give great importance to the environment but this is vague. Some who uphold this theory claim that the environment perfects man.

Now when we repeat the theory that the environment improves man we are not practically conscious of what we mean. What do we mean? What is man? How is it we can better man? We must know what we are, to make him better than.

There is in many sociological and pedagogical theories this great X - What is normal man? Today in biology there are various principles different from those held by Darwin.

The theory can be expressed by saying - the environment is never sole to better or modify the human being. All the profound changes and improvements which take place and come about, are great inner changes in man. The environment could never make these great changes. The modification and perfection of life are the working of life itself. We can cite biologists who followed Darwin, i.e. Negli. He says that the transformation of the species from a lower to a higher plane (or a perfection) comes through the changes and are from inner forces of life.

Since Negli there have been other important experimental studies, 3

i.e. many done in America. But De Vries has contributed perhaps most. He also studied in America. He claims that not only the perfection of species in life and plants, but the greater perfections come from the life itself. For example the wonderful fruits, grains, trees, of California. These changes do not come from environment but life itself.

If there was not the juicy fruit or beautiful flowers, we as men with our environment could not produce them.

Perhaps you will say I am destroying environment in this doctrine. Let me say that these principles of the biologists in your country and in De Vries are stronger than in me. We must admit that this other kind of biology is useful. In admitting they can do nothing, they are the first who really give us better living beings.

Now this second theory which is adopted by your great American cultivators is that which I am trying to bring into the little child's environment. Although this environment can not better and improve life, it is true that it can even destroy life.

If we, being oppressed by the errors and mistakes, can realize and remove them, we can really change the environment.

Supposing we are oppressed by a great error, if this be removed we see a great transformation in life. You see the difference between this and a theory that says we wish to better life, but which remains a vague theory. It need not only be a theory but a positive experimental study of what is oppressing and retarding life to discover how we can relieve and allow life to develop?

My way of expression may at first seem obscure to you. Perhaps if instead of expressing myself in this positive and scientific way, I used some theories it would be clearer to you. For instance, the Christian doctrines which say we must remove sin or the impediments which retard life's growth.

If man is really to be improved it must be an inner change - a work of the inner growth or of the Holy Spirit. The environment must be absolutely favorable to the development of life. And when the environment is completely favorable to life the human being can manifest himself completely. There may be something above this including man's improvement but this is beyond the inner work.

First there is the experimental and practical act to make an environment for life's development. Then there is the analysis that distinguishes facts one from the other.

To return to the biologists the modern ones give more scientific theories than Darwin gave. Whereas the first theory says the environment can modify life, this tells you how to modify life. That is the living, strong being that finds no obstacles and the profound modifications that do not depend on this.

These modern theories are not only more scientific and practical but also more attractive. It certainly was thrilling when Darwin's theory expounded that all which was wonderful was not wonderful. The environment explained all. Perhaps now this excitement is lacking. We see life liberated by removing the errors of slavery.

One of the grestest examples of our time are the studies of Fabre in insect life. Fabre has revealed the insect world. He didn't modify the environment but set free the insects. He observed them in their own environment.

Others studied the insect by taking it out of its environment, so it was not studied in its environment. When you think that in order to study the insect it takes months or a life time - as in the case of Fabre - it is difficult. It would be exceedingly difficult to watch an insect four or five hours, i.e. to watch an insect attempting again and again to roll a ball up a hill. And so for a man to watch an ant, this is a work 5

of patience which, (almost heroic were we not passionately interested) reveals the world to us. When scientists took a butterfly which could fly, or an ant, into a laboratory, they could study the anatomy in slavery but not in real life.

If we put ants in a glass of water we can see how the ant tries to save itself in dying but that will not reveal the life of the ant. And in order to have the wonderful revelation of the life of an ant we must study it in its environment. Thus it was really an abstraction to study insects out of their environment.

This is the importance of the environment,- i.e. if the environment is not favorable life does not manifest itself. All of the wonders revealed to us today in the field of agriculture, all experiments today point to the environment.

The insects or the vegetable life which were previously studied were not worse than those studied today. It isn't the twentieth century environment which gave that psychology to the insects. It is the fact of their having been observed with life or in natural conditions of life.

Let us return to humanity. Picture humanity and in particular the child in an environment not suited and compare him to the same child in a favorable environment. In the first you have a child that is dying - here one alive. If we take it from the physical side,- the child without proper nourishment and proper air is ill, whereas the one that has nourishment and air is well, but that isn't what we mean.

If we reason in the psychic or spiritual field of the child - if we take a child without means for spiritual development the child dies. It is true that taking the child ill in body and soul, by putting him in an environment where he is spiritually and physically improved, he is doubtless helped by the environment, but the environment does not better him - but it saves man! In saving the child there are two facts to be

noted - the spiritual manifestation and then the demonstration that environment does not better, but that it is the environment which makes it possible to study man. This begins to give us the answer to the question, "What is normal man?"

Third Lecture

of

Dr. Maria Montessori

at

The Montessori Normal College

New York City.

Saturday, October 28

1916.

[redacted]

The Casa dei Bambini.

I should like to explain the name of this school - this method.

The name is of importance and often most difficult to define. When we try to give a name to a book or to a new institution generally the name is a symbolic name.

Froebel's name for his school is a symbol, i.e. kindergarten. As you know this name does not mean that the children were to have a real garden but they were to be the flowers in the garden,- so true that the teacher of his method is often called the gardener.

The name "Casa dei Bambini" is not a symbol, but is a practical name. Perhaps you who are familiar with the schools think "Casa dei Bambini" was given because it was to be a home for children. Instead it came from the fact that the "school" began as a part of a home.

The first problem was to find a means of educating people by means of a home. And as we thought of educating in a room which was part of the home, we naturally had the resulting name.

The name recalls the early history of this kind of school and unites two great institutions, the home and the school. Since you are going to spend two years studying this method it is fitting to take time to review the history which is important to understand the spirit of the work.

The tenements where this work began were filled by the least educated people of Rome. First, this section was entirely isolated from the rest of the city since it was outside the gates next to a cemetery where no one would live because of superstitions. The educated never passed by except to funerals.

In this part new tenements had been built which had large apartments which were more expensive than a poor man could well afford. There was little water for small apartments - people who took six room apartments at once speculated by renting out rooms. The room facing the street usually rented to a family, those in the court filled with beds, were rented to

anyone, by the night, often times criminals. So in the same apartments, we had honest and dishonest persons, only because they were both poor. Many rooms were dark even at noon. Though this section was outside the walls, still it was well known from newspapers accounts because of crimes committed there. Immorality was the name of this section. A most notable fact, i.e., the lack of physical hygiene, made this quarter dangerous to others and caused citizens to think of some remedy. The first precaution was to give talks or lectures, but even this was dangerous. It seemed as if it were better to try to get some idea into the minds of these people.

As to cleanliness, Rome was the richest city in water from fountains, etc. It seemed an easy matter to explain the necessity of washing by writing pamphlets on the subject.

We often have the illusion that we can reform society, simply by clearly explaining our ideas. Think how simple a matter it would be if this were the case. Immediately we would have the world reformed!

Cleanliness is the salvation of the child! These people had water which could be used but moderately, not enough for baths, but for the simplest uses, and in the case of twenty-five people, only sufficient for drinking purposes.

Fifteen thousand people lived in these apartments, and if they had been convinced of this idea and formed a procession and gone to bathe, they would surely have been imprisoned. It was, as if we chained a prisoner, and urged him to free himself, but made it impossible by keeping him chained.

In the case of drunkenness, attempts were made to help in spite of all the crimes of the quarter. Every Sunday a prince went to preach to them to teach them resignation. This too is a human instinct, i.e., to think a man can <u>teach</u> others higher morality. At heart, we all think we //

can help the less moral because we seem more moral. When we try to think of bettering humanity we set up ourselves as examples. This is also true of teachers and parents in connection with children.

Now this prince who went to preach doubtless was listened to only by the working men who were compelled to listen to sermons about the crimes of their fellow renters, and they could not get away because of their poverty. So in substance what the prince probably said was, "I have come to give you an example of morality - be resigned, etc. I will go back to my palace - you stay and sleep with your criminals".

The teachers called these parents together, and said it was dangerous to have the children in the street. Yet it was necessary for them to have fresh air and sunlight. Many of these children were unable to do home work for lack of pen and ink, but the majority were unable because of lack of light. All this resulted in a most immoral and dangerous quarter. It was not only dangerous to walk in the streets because of the people, but because all waste was thrown there. It was impossible to teach them not to throw waste out of the windows as it had become a habit, and they were apathetic and could see no reason for change, just because those in better conditions told them to do so.

This often happens when we try to teach our inferiors what they can do. Then we think they are bad because they do not follow our advice. In order to improve people living in such conditions, we must really do something to change their environment.

We often unknowingly say to the ill, "Rise up and walk", whereas we should first give health.

In places of this kind benevolent works are prevalent, and in this particular place there was a nursery school.

People who work according to the ways I have mentioned think they have done enough to deserve the gratitude of fifteen thousand, although

they have only helped ten. Even this does not suffice, so they invite all the city to see their heroic work. They think it helpful to arouse a sense of gratitude in people and think by so doing they give moral lessons. It is often said that it is good for the rich to see poverty at first hand, because it counteracts the content of the rich. I have also heard it said that it would be good for the better class of children to go to the poor and carry gifts, etc., in order to educate their consciences.

No mother would say, "Sell all thou hast and give". No, she almost says give that little, and buy some morality for yourself. So there is a sort of game in this goodness and benevolence.

The work of which I speak was not benevolent. It was not speculative, but had an economic basis. The capital of the owners diminished as the houses were dismantled and they became dens of iniquity. So the owners decided to remodel and make good investments. They made small apartments for only one family with plenty of water, etc. Calculations were made of the cost of keeping the apartments in repair. They said to the families, "Can you see to it that no damage is done to the apartments, and keep them clean? If so, money set aside for repairs will be divided between owner and renter, and by doing so we will lessen the rent".

But little children of three to six years couldn't understand this but it was solved by getting the little ones together in rooms. Calculating the room space necessary, it was found that 1 lira a month per family would support a school, and by adding this to the rent they might have a free school. Some thought it better to have the parents pay for the care of the children and then mothers were told that the children must have better clothes and be kept clean. This was an advantage for both sides. As this project worked out about forty per cent was saved

on repairs.

When this society established these dwellings they called me to organize the school for children of three to six years of age. There the name arose, since the school was in the house.

Having an opportunity to have full liberty with sixty children I began to put into practice the pedagogical ideas I am still studying. This brought most surprising results far beyond my highest expectations. One of the great surprises was the influence of the little children on the adults. The most tangible result, was that the parents who were all illiterate, were so impressed at the sight of little children writing or reading, that they felt the children were superior to themselves. Many came to school to ask to learn to read and write for they thought it must be easy since the little ones learned so quickly. Many learned, and often on the blackboards the writing of both children and parents was found.

Children began to say, "Don't throw that greasy paper on the floor, it will be hard to wash". The mother had never thought of that. Often a child buttoned the mother's dress. So a new atmosphere was brought about.

It was very hard to teach the parents to wash themselves. A lady gave them some washbowls and then later found them used only as receptacles for scissors, etc. Once a little child wanted to wash herself before going to school but her mother shoved her away. The child went into the laundry and found a little water. Her ability so impressed the mother that she permitted the washing from that time on.

Plane geometrical insets impressed fathers who were interior decorators. A little child of four speaking of a triangle, etc. impressed such a father deeply: They got together in order to make a complimentary recommendation which said, "We recommend the work you are doing for our

children are having an education which if we had had, would have made it impossible for us to be just workmen". Mothers and fathers were so interested that they stayed at home to talk with their children.

Without further detail I want to impress you with the fact that little children are more powerful educators of adults than we are of them. Usually we think that adults must be taught to teach the child.

I do not believe we can say that this education is good for the poor but not for us. How do we know? The results become general and our opinions change!

Besides being a civilizing means, this school, which was a continual object lesson, interested the parents from an educational point of view. (Showing picture).

I am sorry not to have a larger photo to show the people looking in watching the children. Often the school windows were full of the mothers heads. Often a plate of some savory dish or fruit was left unannounced.

One of the greatest aims of the school should be to interest and to bring school and home in closer relation to each other. Perhaps it is strange to you that we should have had such a presumption as this in Italy, where so many parents are ill or where the children went for but a short time. But putting the school in the house where parents saw it daily, they became interested, and the parents continued their interest in the school work throughout the grades.

So this institution began to solve educational and pedagogical problems. You know that the attendance of small children is often irregular. With fifty children enrolled, there is often an attendance of twenty-five. But here, as the school was in the house, the attendance was excellent except when the individual children were ill. There was less illness as there was no going out in the rain. Also there is not the danger of children crying or not wanting to go to school as they can

be in school and call to the mother who can answer from the window. So there is not the usual cruel separation. The child enters the path of education gently and sweetly and sends out rays of his education to his parents. Visitors often remarked that their children did not have as good advantages, and they asked permission to place their children in our school, though the separation which they deplored would be necessary. Later they asked for a school in their own houses. It is a great advantage and a luxury. Only the wealthy can leave children to the care of a trained woman. Here the teacher lived in the house and was a constant companion to mother and children. The wealthy who visited and desired the school for their children often remarked, "This is the first time we have ever envied the poor as they perhaps have envied us".

Thus a school was founded at the English embassy and the ambassador's wife was the directress. But there was still the disadvantage that it was not a school in the home accessible to all of the children. Many mothers spent a morning there watching the children. So the principle of a "school in a house" is the beginning of the solution of many heretofore unsolved social and pedagogical questions.

When once the doors of the educational field are opened to the people they will enter joyously and eagerly. If we realize that today the papers furnish most of the education of people, we have an idea of what it would mean if education could become as much a part of home as is the electric light. This is the only way to know family by family. Real sociology is only known by knowing individuals of family life. So perhaps in the future when education is spoken of, it will not always be of the school but also of the home.

Just as it is useless to tell people to wash if they haven't water, so education can only be given when it penetrates the home. It is useless to try to penetrate homes by writing. Even a newspaper is but paper 9

and words. God created with a word, but we cannot do so. We can do little by means of words, we must show the facts, and only in this way can we prove. But of this we will speak later.

We must have a different environment in order to bring about reform, and the preparation of the environment is that which can actualize the ideals we now hold.

C 1117 (No Renewal)
6/28/62

"Casa dei Bambini" (The)
4th Lecture

1917

Dr. Montessori

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Fourth Lecture

by

Dr. Maria Montessori

at

The Montessori Normal College

New York City.

November 9, 1916.

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It would be very useful for you to make a study of biology in its modern practices and application, i.e., the study of plants in order to bring about a development of species. We will take this example - formerly one judged a field of grain by the harvest. This grain seems more or less to be the same. We speak of the cultivation of grain but upon analysis we find the grain different.

The grain is taken stalk by stalk, the seeds measured and weighed. Many qualities are found mixed together and some are better than others. If then, instead of taking all, one takes the best and cultivates it he gets a better crop. After several years looking at this one says, "But this grain is different". The grain isn't improved but a better quality has been isolated. This is primarily done in every science, i.e., the differentiation or classification.

We will not say that because one is better than the other that the others need not be considered, but some needed special ground for cultivation. Then the study of soil is necessary in order to give the best special cultivation. The ground is cultivated more and more - foreign substances are removed, and growth is made more certain. Some need damp soil, others need dry soil. Some can be produced in any kind of soil - others need a particular zone. Thus little by little one's knowledge of species increases, but there is also the principle of isolation and differentiation.

There is also this principle in modern science. A specific study of plants and their environment shows the plants not improved but cultivated in their environment. I repeat that the grain is not really <u>better</u> but, an added opportunity has been given to the best of that better grain, and the principle is this: give all the conditions for growth.

Not only are there special fields for plants but special laboratories. So there has come the knowledge of a differentiation of the characteristics of the plants. There are latent characteristics which are

developed in the environment. It does not mean that the environment gives the characteristics but gives the opportunity for growth, to characteristics that have formerly been suppressed. This is linked with the study of evolution. A correct environment allows not only the beautiful to develop, but it brings out latent characteristics.

There are latent characteristics that do not correspond directly to the environment. There are characteristics that develop because of the force of life itself. For instance, take the child who cuts his teeth, they are not created because of environment but because of a latent inner force. Yet the environment could act as an obstacle to the development of characteristics that are a part of life itself,- these latent characteristics linked to the individual could conquer the environment. The environment helps to develop those latent characteristics that are in direct accordance with the environment as well as those directly corresponding to life itself.

These two characteristics are not new - like a man with a mark they are latent but always new. In evolution there may come a new species - but latent characteristics are old. Now all of these characteristics already in existence or apparent are in accord with environment. They are not new but are helped by environment. Today one finds in plants new characteristics and new species, but this has nothing to do with environment. If environment does not permit, they may not be seen but they do not come from the environment, they are developed by the environment.

We need scientific experience with plants. De Vries, who makes a study of plants, can see these characteristics when we would not notice them. However, it is interesting to note that new characteristics may appear because of the influence of the life itself, even though they are not made by environment.

Perhaps it would interest you to know that these characteristics 4

have different names. Dr Vries names them as follows:-

Mutations are those which come from the impulse of life itself,- variations those that come from the environment. Undoubtedly the seeds furnish an interesting study.

There are special laboratories and gardens where one cultivates seeds, to give all that is necessary for their growth, but these interesting studies which are similar or analogus, have not been made on humanity. We are perhaps, in an inferior state, so far as studying human beings is concerned, and gather in our whole harvest, as people once gathered grain. We count the entire number, but we do not give them fields where they can live together.

Take for instance the people of San Lorenzo where I began my experiments. Criminals and all were together. The nearby tenements gathered one part of the mixture,- the better part. You will say that there are better means here for development than in Rome. Nevertheless this better cultivation is not yet a scientific cultivation of people. There is an abyss between the cultivation of people and the cultivation of plants. This fact is interesting at the outset. Evidently the cultivation of people is closely related to the house.

Many have repeated that the schools must better the people. At the same time they say that only a small part of time is spent in school. This suffices to show us that the hope of humanity can not be in the school but in the home. Think of the idealistic phrases one so often repeats concerning the home, i.e. "The family is a nucleus of society and the cell of all humanity". Now this family can not be conceived of as an abstraction but only relative to its environment. And as the environment of the family is the house, one must think of the corresponding characteristics. Up to the present, we have thought of the economical side but not the complex needs of the house. If a rational study were

made, it would necessarily be in the houses of the people.

One weighs and studies grains. Human beings should be studied in like manner. A great sociologist said, that until we studied the individual families, the needs of the national government could not be known.

Now you know that in scientific pedagogy there is the study of the child. This is not always practiced in the school. The study should be made in the home and not in the school. With these principles the house becomes of social importance. It remains no longer only a hygienic principle of instruction.

In order to realize social needs the form of the house is important. In order that the moral life of the family be guaranteed, each family should have its own separate house. In order to have the advantages of experimental study, many families should live in close proximity.

The plan I will describe is not mine, but a practical housing scheme.

Imagine the usual streets where the houses are in the form of a circle. Each family has a separate house with a garden. This plan not only allows each family to have a separate house, but also permits of a colony of people. With a colony social organization is possible. One of the most interesting features is a school, surrounded by a park. The germs of the family, so to speak, are cultivated in the center, with a method which allows the spontaneous development of inner activities, so that these moral and intellectual forces have no obstacles in their development. It would be like taking the seeds of large plants and putting them in a garden for cultivation. These human germs are protected with moral warmth by the family. These germs would be kept here until sufficiently strong to go forth, so that the human being not only would have physical protection, but also social protection. The liberty of the children is guaranteed by the very shape of the housing plant because not

only do they have space and air but protected streets. Imagine a larger circle of houses with an inner circle of houses and the possibility of a still greater population. This population is in the midst of sun and air because the form permits sun and air on all sides as well as isolation from the outer life. Imagine the peace and tranquility of it all. You can imagine a moonlight night with quiet where one could be in peace and meditate. At the same time these children who are developing in the centre will serve as an attraction for the parents. There is more than sun and air, water without microbes, and electric lights. Something more enters which is necessary for the cultivation of human beings. Imagine these houses being built with a criterion of beauty which has before been only the slogan of the rich.

In my method you will note that the beautiful is not superfluous but only necessary for the spiritual development. So picture this attractive group of houses. Beauty costs little - besides beauty is in contrast to the material. Harmony and beauty do not cost. Often an ugly drawing-room would be more attractive if certain things were removed. Removals do not always cost.

Imagine attractive facades of houses with the larger building reserved for the children. A large cupulo like a church perhaps and colored streets! One can picture the whole filled with beauty. Without beauty we cannot cultivate the human being.

It is scientific to study life within certain limits. For instance, one person keeps her house very clean. If too large, she cannot keep it clean - if too small, she cannot live. Now one could study the limits, so that the family is given necessities but is not burdened. Carrying this to other limits - types of houses could be found for types of man. The man who recognizes this could form a homogeneous experimental field. Each family is isolated. Instead of considering material needs alone one 7

could consider the people of the individual families and we could also find the minimum needs for a group. As there is a certain kind of field for different kinds of grain, so also there might be for people. One could have experimental buildings. For example, in the corners of the block, an infirmary well kept with trained nurses. Those who were ill could be isolated but need not be separated. The family life could peacefully continue even if someone was ill. At the same time those who did visit would practically learn how to care for one who was ill. Suppose also a kitchen was established where one could learn food hygiene. Also club rooms, i.e., different responses to different needs. This brings peace instead of agitation,- the agitation of sending a child a long distance to school, cooking things the housewife does not understand, how to cook. This is not peace, nor does it make possible the emancipated woman whom we long for. This isn't the woman who will say, "Instead of a little house I want the world". This woman needs a house corresponding to her needs. When we say that the woman must be emancipated and that we want peace, we only repeat words. It is the element of the home that must prescribe the needs. Imagine the person who could say, "My child is at school, my husband is at the club, my sick are at the hospital, and I may study".

It is not sufficient to study people, only but we must put them in peaceful conditions necessary for their growth. Then with the school in the center it would be possible to study the families - not only study them, but also to put the family in good physical condition. Imagine the possibility of balancing families in these experimental fields where the needs of the families corresponded to their environment. Then one could assist in a wonderful betterment of the personality. People are known through their children. When there is a possibility of developing that within, there is also the possibility of cultivating that not within.

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Then a person might say, "I want to respond to the needs of people because I know the needs". There are fundamental means whereby the characteristics of people can be shown,- until shown the corresponding need can not be given. But it doesn't suffice for you to just desire your wish.

In education we say we must respond to the psychic needs of the child, but the psychic doesn't become manifest without a correct environment. We cannot understand latent characteristics that do not develop. Such environments are necessary for the people.

Today humanity is veiled and all goes on as if man was blind, much more by chance, than the work of the wind in carrying of seeds. For instance, there are those who can only live in a certain kind of environment, and sometimes those who should stay are carried away. The necessary knowledge of a social science is not to be had without the preparation of certain conditions. There must be a real practical foundation laid. Without this the realization of the ideal is not possible. It is so often repeated that we wish to better humanity - but we must realize that we must reach the whole of life, i.e., the school and the home. Giving an environment, fitting the whole life, more than just the physical is necessary. It is as though in scientific experiments we first prepared the instruments, then the experiment.

The more perfect the preparation, the better the experiment. Therefore this is the principle, i.e. - in order to study the child, prepare the environment,- in order to study people prepare their environment. Without environment there will be no manifestations to study.

Fifth Lecture

by

Dr. Maria Montessori

at

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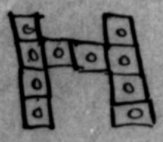
It is not, then, the environment which gives character or develops life, but the environment is that which allows life to develop. The characteristics of life are given by life itself and those characteristics depend upon life itself.

Biologists make a synthesis of the different phases of life - i.e., the different pictures of the animal and vegetable realm are shown by giving their origin. The vegetable life has a cell with thick hard walls . The animal cell has a thin membrane. This vegetable cellula is in better condition than the animal because it is protected by thicker walls. This membrane also renders the cellula non-sensitive to the stimuli. Judging these according to usual standards we would consider one strong and protected and the other weak and sensitive. We are apt to consider sentitiveness weakness. The manner of development from origin is also in accordance with weakness and strength. For instance the vegetable cell multiplies by spreading over the environment,



(algae).

The animal cellula spreads by forming in a spherical shape:

(volvox)

The first, i.e., algae from vegetable, forms a long line. The volvox, or animal cell, forms a sphere. Another characteristic of this form of life is that it fixes itself in the ground in order that it may nourish itself. This weak and unprotected being has to seek its nourishment. In accordance with our concept we might judge that one was strong, rich, and powerful,- the other weak and poor. This is also the criterion we have of moral strength, i.e., the firm person rooted in such a way he can not change - strong. The man who is rich and powerful and does not need to move, but who because of his power can evade his environment is like the vegetable life. This animal life, on the other hand, is weak, - it seeks its nourishment and it dies without nourishment. It is very sensitive. The vegetable life continues along its lines, the animal along its, and we have evolution, like a strong tree established with its roots spreading in the ground. Whose spreading branches evade the environment.

When the vegetable life grows, it does not do this because of lack of nourishment but because of its life - the animal is as it is because it was meant to be that way.

When the animal cell enlarges it grows upon itself instead of spreading over its environment, like a humble timid being that withdraws within itself. The continued development of the animal life makes more layers and a greater inner complexity until in the higher beings like man, the involutions are compact and take but little space, but if outspread would occupy much space. In the lungs for instance, if the respiratory surface were outspread there would be 300 square meters of space covered. We can not

imagine how much space man would cover if considered according to the vegetable scale. Man occupies little space but his inner complexities are many - like a great person hiding his merits. The animals have, in contrast, a characteristic of seeking and spreading out to take nourishment. Walking and moving about they are in danger because of their sensitiveness. Nature has covered them and protected them with appendages in their fight for existence - one has fur or other external covering, others have shell-like armor, some strong teeth, etc. Every animal has his armor. This famous armor was a fundamental part of Darwin's theory. Not only do they have this external armor but also protecting instincts that keep them from danger. We know that in case of an earthquake animals are often terrified even before the earthquake is apparent. Eskimo dogs running side by side often separate and then the guide discovers a crack in the ice of which he had not known. These humble, hard-working beings or cells are protected by their armor and instincts. And these weapons were not brought about by the environment. It is not that the animal was given arms because of danger but in order that he might conquer danger and environment. All these things and all these new characteristics in a being come because of an inner explosion. In order that these explosions may occur and life accomplish its cycle, it is necessary to have the environment correct. If we wish to observe an explosion, it is necessary to know the strong moments. So it is necessary that the environment give the right conditions, if life is to completely develop? The union of beings and environment is not one of cause and effect but a union must be considered from the point of giving means, not transforming life. Man enters like an animal of his own kind. He is not a vegetable taking nourishment with his

roots, but one going in search, except that man hasn't the arms and instincts to save himself. He is like an unarmed animal but without even the instincts of salvation. If we judged him off hand we would say man was most neglected while the large tree is king of creation. Man's skin is naked - even his teeth are weak. If we examine the skull of an animal we find not only a strong bony structure but also horns for defense. Man has only a smooth skull. If a man wishes to kill another he strikes his skull. Falls to children are dangerous because of the fragile condition of their heads. In measuring muscular strength of animals and man we find that animals have nine or ten times the strength of man. Man has neither fur nor scales. Animals at birth know how to live immediately. Think of the little colt that runs about a few hours after birth, already dressed in fur. Certain animals go through stages of weakness. Man is the weakest of all animals that are born. Man walks in an upright position, animals go on all fours. One characteristic of man is called speech but the new born child does not speak. Man not only works for his living but he has to work to form himself and complete his own creation. He must also create his own weapons of defense, he must attain the instincts of salvation with effort - he must do it alone, he must seek his own instincts of salvation. If we picture all phases of man's life we might compare him to a slave in nature. A working man can get cooked food after his work. The slave has to get his grain, grind it, cook it, and prepare his nourishment. Man is the most sensitive because of his unclothed skin. Man certainly has been helped by nature. Instead of having things prepared for him man has the means of making instruments for himself.

Nature's criterion is different from that of man. In nature

the inferior being is the one which suffers least, eats bountifully and evades his environment, his superiority is far removed from the vegetable criterion. His struggle for existence makes for superiority.

When we speak of one living an animal life or vegetative life it is well to know nature's criterion. The form of being is not given by the environment. In beings that have the instinct to work it is nature which makes them work. It is nature that makes man defend himself and go beyond the animal. The environment gives him only the means. As nature gives the means, the better the means the better the development. Thus if we give ourselves this problem, i.e., to make the child struggle for his development we can only give him a good environment. Instead there is usually this criterion, i.e., give the child difficulties for development. But he is a struggler by nature, and the better opportunities we give for development the better the development. I repeat it is his nature to struggle for development. We have this error in education, i.e., we remove the real means and by so doing we take away development. A similar error is made when we say - we will remove the earth in order to make the tree strong. Thus with the child, if we remove the means, we make him weak. We have had the concept of <u>creating</u> the child by environment instead of helping him to live by means of his environment.